## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

| Application Serial Number: | 10/5 | 62   | کے ر | 389  |
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| Date Processed by STIC:    | <br> | 01/1 | 7/   | 2007 |
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## ENTERED



T FWP

RAW SEQUENCE LISTING DATE: 01/11/2007
PATENT APPLICATION: US/10/562,389

DATE: 01/11/2007
TIME: 09:42:42

Input Set : A:\13407-039US1.txt

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             Brass, Laura
      7 <120> TITLE OF INVENTION: SIRT1 AND GENETIC DISORDERS
     10 <130> FILE REFERENCE: 13407-039US1
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/562,389
C--> 12 <141> CURRENT FILING DATE: 2005-12-27
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    13 <151> PRIOR FILING DATE: 2004-07-01
    15 <150> PRIOR APPLICATION NUMBER: US 60/484,327
    16 <151> PRIOR FILING DATE: 2003-07-02
    18 <160> NUMBER OF SEQ ID NOS: 3
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    37 Ala Asp Glu Ala Ala Leu Ala Leu Gln Pro Gly Gly Ser Pro Ser Ala
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    45 Arg Lys Arg Pro Arg Arg Asp Gly Pro Gly Leu Glu Arg Ser Pro Gly
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    48 gag ccc ggt ggg gcg gcc cca gag cgt gag gtg ccg gcg gcg gcc agg
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    49 Glu Pro Gly Gly Ala Ala Pro Glu Arg Glu Val Pro Ala Ala Arg
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    52 ggc tgc ccg ggt gcg gcg gcg gcg ctg tgg cgg gag gcg gag gca
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    53 Gly Cys Pro Gly Ala Ala Ala Ala Leu Trp Arg Glu Ala Glu Ala
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   56 gag gcg gcg gca ggc ggg gag caa gag gcc cag gcg act gcg gcg
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   57 Glu Ala Ala Ala Gly Gly Glu Gln Glu Ala Gln Ala Thr Ala Ala
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RAW SEQUENCE LISTING DATE: 01/11/2007 PATENT APPLICATION: US/10/562,389 TIME: 09:42:42

Input Set : A:\13407-039US1.txt

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| 65  | Pro   | Pro  | Leu   | Ala   | Asp  | Asn  | Leu   | Tyr  | Asp  | Glu   | Asp   | Asp  | Asp   | Asp   | Glu  | Gly   |                                    |
| 66  |   | 115  |   |   |  |  | 120   |  |  |   |   | 125  |   |   |  |   |                                    |
|   |   |  |   | gaa   |  |  |   |  |  |   |   |  |   |   |  |   | 488                                |
| 69  | Glu   | Glu  | Glu   | Glu   | Glu  | Ala  | Ala   | Ala  | Ala  | Ala   | Ile   | Gly  | Tyr   | Arg   | Asp  | Asn   |                                    |
|   | 130   |  |   |   |  | 135  |   |  |  |   | 140   |  |   |   |  | 145   |                                    |
|   |   |  |   | ggt   |  |  |   |  |  |   |   |  |   |   |  |   | 536                                |
| 73  | Leu   | Leu  | Phe   | Gly   | _  | Glu  | Ile   | Ile  | Thr  |   | Gly   | Phe  | His   | Ser   |  | Glu   |                                    |
| 74  |   |  |   |   | 150  |  |   |  |  | 155   |   |  |   |   | 160  |   |                                    |
|   |   |  |   | gag   |  |  |   |  |  |   |   |  |   |   |  |   | 584                                |
|   | Ser   | Asp  | Glu   | Glu   | Asp  | Arg  | Ala   | Ser  |  | Ala   | Ser   | Ser  | Ser   |   | Trp  | Thr   |                                    |
| 78  |   |  |   | 165   |  |  |   |  | 170  |   |   |  |   | 175   |  |   | 520                                |
|   |   |  |   | cgg   |  |  |   |  |  |   |   |  |   |   |  |   | 632                                |
|   | Pro   | Arg  |   | Arg   | Ile  | Gly  | Pro   |  | Thr  | Phe   | Val   | GIn  |   | His   | Leu  | Met   |                                    |
| 82  |   |  | 180   |   |  |  |   | 185  |  |   |   |  | 190   |   |  |   | 600                                |
|   |   |  |   | gat   |  |  |   |  |  |   |   |  |   |   |  |   | 680                                |
|   | Ile   | -  | Thr   | Asp   | Pro  | Arg  |   | He   | Leu  | Lys   | Asp   |  | Leu   | Pro   | GIU  | Thr   |                                    |
| 86  |   | 195  |   |   |  |  | 200   |  |  |   |   | 205  |   |   |  |   | 700                                |
|   |   |  |   | cct   |  |  |   |  |  |   |   |  |   |   |  |   | 728                                |
|   |   | Pro  | Pro   | Pro   | GIu  |  | Asp   | Asp  | Met  | Thr   |   | Trp  | GIn   | ше  | vaı  |   |                                    |
|   | 210   |  |   |   |  | 215  |   |  |  |   | 220   |  |   |   |  | 225   | 776                                |
|   |   |  |   | tca   |  |  |   |  |  |   |   |  |   |   |  |   | 776                                |
|   | Asn   | TTE  | ьeu   | Ser   |  | Pro  | Pro   | ьys  | Arg  | _   | ьys   | Arg  | ьуѕ   | Asp   |  | ASII  |                                    |
| 94  |   |  |   |   | 230  |  |   |  |  | 235   | ~~~   | -~-  |   |   | 240  | 2+2   | 824                                |
| 96  | aca   | att  | daa   | gat.  | acr  |  |   |  |  | Caa   |   |  |   |   |  |   |                                    |
| 07  | (T) b = 0   |  |   |   |  |  |   |  |  |   |   |  |   |   |  |   | 024                                |
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| 98<br>10  | ) gtt   | Ile<br>t cta   | Glu<br>a act  | Asp<br>245<br>gga   | Ala  | Val<br>ggg   | Lys<br>gtg  | Leu<br>tct   | Leu<br>250<br>gtt  | Gln<br>tca  | Glu<br>tgt  | Cys<br>gga   | Lys<br>a ata  | Lys<br>255<br>a cct   | Ile<br>gac   | Ile<br>ttc  | 872                                |
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| 98<br>100<br>100<br>100   | O gtt<br>L Val  | Ile<br>t cta<br>l Le   | Glu<br>a act<br>ı Thı<br>260  | Asp<br>245<br>gga<br>Gly  | Ala<br>gct<br>Ala  | Val<br>ggg<br>Gly  | Lys<br>gtg<br>Val                                     | Leu<br>tct<br>Ser<br>265   | Leu<br>250<br>gtt<br>Val   | Gln<br>tca<br>Ser   | Glu<br>tgt<br>Cys   | Cys<br>gga<br>Gly  | Lys<br>a ata<br>7 Ile<br>270  | Lys<br>255<br>a cct<br>e Pro  | Ile<br>gad<br>Asp  | Ile<br>ttc<br>Phe   | 872                                |
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| 98<br>100<br>100<br>100<br>100<br>100<br>100                            | O gtt<br>L Val<br>2<br>4 agg<br>5 Arg   | Ile<br>t cta<br>Let<br>g tca<br>g Sea<br>27!   | Glu a act 1 Thi 260 a agg   | Asp<br>245<br>gga<br>Gly<br>ggat<br>g Asp   | Ala<br>gct<br>Ala<br>ggt   | Val<br>ggg<br>Gly<br>att   | Lys gtg Val tate Tyr 280                              | Leu<br>g tct<br>Ser<br>265<br>gct<br>Ala                           | Leu<br>250<br>gtt<br>Val<br>c cgc  | Gln<br>tca<br>Ser<br>ctt<br>Lev   | Glu<br>tgt<br>Cys<br>gct<br>Als                             | Cys<br>gga<br>g Gly<br>gta<br>Val<br>289                           | Lys<br>a ata<br>7 Ile<br>270<br>a gao<br>l Asp                                | Lys 255 a cct e Pro c tto   | Ile<br>gad<br>Asp<br>cca<br>e Pro  | Ile<br>ttc<br>Phe<br>gat<br>Asp   | 872                                |
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| 98<br>100<br>100<br>100<br>100<br>100<br>110<br>110<br>110              | 0 gtt<br>1 Val<br>2<br>4 agg<br>5 Arg<br>6<br>3 ctt<br>9 Let<br>0 290<br>2 cca  | Ile  t cta Let  g tca g Ser 27! t cca l Pro  | Glu a act 1 Thi 260 a agg r Arg 5 a gat D Asp   | Asp<br>245<br>gga<br>Gly<br>g gat<br>g Asp<br>c cct<br>p Pro  | Ala gct Ala ggt Gly Caa Gln                                      | Val<br>ggg<br>Gly<br>att<br>Ile<br>gcg<br>Ala<br>295                             | Lys gtg Val tate Tyr 280 atg Atg                      | Leu y tct Ser 265 y Ala y ttt Phe                                  | Leu 250 gtt Val Grand Arg  | Gln tca Ser ctt Let att lle   | Glu tgt Cys gct Ala Glu | Cys  gga gga gta Val 285 a tat Tyn catata                          | Lys a ata y Ile 270 a gac l Asp c ttc r Phe                                   | Lys 255 a cct Pro tto Phe aga aga aga aga aga aga aga                           | Ile  gac  Asp  cca  pro  aaaa  Lys   | Ile  ttc Phe  a gat Asp a gat Asp a gat ttc   | 872<br>920<br>968                  |
| 98<br>100<br>100<br>100<br>100<br>100<br>110<br>111<br>111              | 0 gtt<br>1 Val<br>2<br>4 agg<br>5 Arg<br>6<br>3 ctt<br>9 Lei<br>0 290<br>2 cca<br>3 Pro   | Ile  cta Let gtca g Ser 27! cca pro ca aga aga aga aga aga aga   | Glu a act 1 Thi 260 a agg r Arg 5 a gat o Asi a cca g Pro                             | Asp 245 gga Gly ggat g Asp c cct p Pro  | Ala gct Ala ggt Gly caa Gln ttc                                  | Val<br>ggg<br>Gly<br>att<br>Ile<br>gcg<br>Ala<br>295<br>aag                      | Lys gtg Val tat Tyr 280 Jate Met                      | Leu y tct Ser 265 y Ala y ttt Phe                                  | Leu 250 gtt Val c cgc Arg gat Arg Lys  | Gln tca Ser ctt Let Let ltatt Jen   | Glu tgt Cys gct Als Glu | Cys  gga gta yal 285 a tat Tyr catat                               | Lys a ata y Ile 270 a gad L Asp c tto r Phe                                   | Lys 255 a cct e Pro c tto p Phe c aga e Arg c gga c Gly                         | Ile  gac  Asp  cca  pro  aaaa  Lys   | ttc Phe a gat Asp a gat Asp a gat Asp a ttc Phe   | 872<br>920<br>968                  |
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| 98<br>100<br>100<br>100<br>100<br>100<br>100<br>110<br>111<br>111<br>11 | 0 gtt<br>1 Val<br>2<br>4 agg<br>5 Arg<br>5 Ctt<br>9 Let<br>0 290<br>2 cca<br>3 Pro  | Ile  cta Let gtca g tca g Ser 27! cca p Pro a aga o Aro  | Glu a act 1 Thi 260 a agg r Arg 5 a gat D Asp a cca g Pro                             | Asp 245 gga Gly ggt Asp cot Pro   | Ala gct Ala ggt Gly caa Gln ttc Phe 310                          | Val<br>ggg<br>Gly<br>att<br>Ile<br>ggg<br>Ala<br>295<br>aage Lys                 | Lys gtg Val tat Tyr 280 gatg Met                      | Leu y tot Ser 265 y Ala y ttt Phe                                  | Leu 250 gtt Val c cgc Arg Arg Lys ata  | Gln tca Ser ctt Let let let gaa gaa gaa gaa   | Glu tgt Cys gct Ala Glu 300 a ata Ile G                     | Cys  gga gga gta 285 a tat 1 Tyr  tat Tyr  tat gta gta tat         | Lys a ata y Ile 270 a gad l Asp c tto r Phe c cct c Pro                       | Lys 255 a cct e Pro c tto p Phe c aga e Arg c Gly                               | Ile  gac  Asp  Code  Pro  a aaa  Lys  a caa  / Glr  320  gaa   | Ile  ttc Phe a gat Asp a gat Asp 305 ttc Phe a gga                                      | 920<br>968<br>1016                 |
| 98<br>100<br>100<br>100<br>100<br>100<br>100<br>110<br>111<br>111<br>11 | 0 gtt<br>1 Val<br>2<br>4 agg<br>5 Arg<br>6 290<br>2 cca<br>3 Pro<br>4<br>6 cag<br>7 Glr   | Ile  cta Let gtca g tca g Ser 27! cca p Pro a aga o Aro  | Glu a act 1 Thi 260 a agg r Arg 5 a gat D Asp a cca g Pro                             | Asp 245 gga Gly ggt Asp cot Pro   | Ala get Ala ggt Caa Gln Cttc Ttc Ttc Ttc Ttc Ttc Ttc Ttc Ttc Ttc | Val<br>ggg<br>Gly<br>att<br>Ile<br>ggg<br>Ala<br>295<br>aage Lys                 | Lys gtg Val tat Tyr 280 gatg Met                      | Leu y tot Ser 265 y Ala y ttt Phe                                  | Leu 250 gtt Val c cgc Arg Arg Lys ata  | Gln  tca  Ser  ctt  Let  att  let  gaa  Glu  315  agc  Alae  Alae   | Glu tgt Cys gct Ala Glu 300 a ata Ile G                     | Cys  gga gga gta 285 a tat 1 Tyr  tat Tyr  tat gta gta tat         | Lys a ata y Ile 270 a gad l Asp c tto r Phe c cct c Pro                       | Lys 255 a cct e Pro c tto p Phe c aga e Arg c Gly                               | Ile  gac  Asp  c cca  e Pro  a aaa  g Lys  a caa  / Glr  320  g gaa  s Gli   | ttc Phe a gat Asp a gat Asp a gat ttc Phe   | 920<br>968<br>1016                 |
| 98 100 100 100 100 100 110 111 111 111 11                               | 0 gtt<br>1 Val<br>2<br>4 agg<br>5 Arg<br>6 2<br>9 Leu<br>0 290<br>2 cca<br>3 Pro<br>4<br>6 cag<br>7 Glr                             | Ile  t cta Let  g tca g Set 27! t cca l Pro  a aga o Arc   | Glu a act 260 a agg r Arg a gat D Asp a cca g Pro                                     | Asp<br>245<br>gga<br>Gly<br>ggat<br>g Asp<br>cct<br>p Pro   | Ala get Ala ggt Caa Gln Cttc Ttc Ttc Ttc                         | Val<br>999<br>Gly<br>att<br>Ile<br>Ala<br>295<br>aag<br>Lys                      | Lys  gtg Val  tat Tyr 280 atg Met ttt Ttt             | Leu y tct Ser 265 c gct Ala y ttt Phe c gca Ala ttc                | Leu 250 gtt Val Grand Argan Aspan As | Gln  tca  Ser  ctt  Let  att  let  gaa  gaa  gaa  gaa  gaa  gaa   | Glu  tgt Cys cgct Ala cgas Glu 300 a ata Ile                | Cys  gga gta gta 289 a tat Typ a tat gta gta ser                   | Lys a ata y Ile 270 a gac l Asp c tto r Phe c cot c Pro a gat r Asp           | Lys 255 a cct c Pro c tto p Phe c aga e Arg c Gly c Lys 335                     | Ile  gac  Asp  ccca  pro  aaaa  Lys  acaa  Glr  320  gaa  Glr  320   | ttc Phe a gat Asp a SAsp a Gat ttc Phe a gat Gly  | 920<br>968<br>1016                 |
| 98 100 100 100 100 100 111 111 111 111 11                               | O gtt<br>Val<br>2<br>4 agg<br>5 Arg<br>6 290<br>2 cca<br>3 Pro<br>4<br>6 cag<br>7 Glr<br>3 aaa                                      | Ile  t cta Let  g tca g Set 27! t cca l Pro a aga o Arg  | Glu  a act 260 a agg r Arg a gat c Asp a cca g Pro a tct c Sei a ctt                  | Asp 245 245 245 245 247 247 247 247 247 247 247 247 247 247   | Ala get Ala ggt Caa Gln Cttc Cys Caa Cys Caa                     | Val<br>ggg<br>Gly<br>att<br>Ile<br>Ala<br>295<br>aag<br>Lys<br>Cac               | Lys gtg Val tate Tyr 280 atg Met ttte The             | Leu y tct Ser 265 gct Ala y ttt Phe gca Ala tto                    | Leu 250 250 250 251 252 253 253 254 255 255 255 255 255 255 255 255 255  | Gln  tca  Ser  ctt  Let  att  Ile  gaa  gaa  gaa  gaa  ata  cata  | Glu tgt Cys gct Ala Glu | Cys  gga gga gga yal 289 a tat Typ a tat e Typ g toa c ace         | Lys a ata y Ile 270 a gac l Asp c tto Phe c ct c Pro a gat c Asp              | Lys 255 a cct c Pro c tto p Phe c aga e Arg c Gly c Lys 335 g gas               | Ile  gac  Asp  ccca  pro  aca  Glr  320  gaa  Glr  320  gaa  Glr  aca  cca  cca  cca  cca  cca  cca  c                         | Ile  ttc  Phe  a gat  Asp  305  ttc  Phe  gga  Gly  ggtt                                | 920<br>968<br>1016<br>1064         |
| 98 100 100 100 100 100 111 111 111 111 11                               | O gtt<br>1 Val<br>2 agg<br>5 Arc<br>6 Ctt<br>9 Leu<br>0 290<br>2 cca<br>3 Pro<br>4 caç<br>7 Glr<br>3 aaa<br>1 Lys                   | Ile  t cta Let  g tca g Set 27! t cca l Pro a aga o Arg  | Glu  a act 260 a agg r Arg a gat c Asp a cca g Pro a tct c Sei a ctt                  | Asp 245 245 2 gga 3 gat 3 cc 4 tc 5 Pro 6 Leu 3 25 6 cc 6 Arg   | Ala get Ala ggt Caa Gln Cttc Cys Caa Cys Caa                     | Val<br>ggg<br>Gly<br>att<br>Ile<br>Ala<br>295<br>aag<br>Lys<br>Cac               | Lys gtg Val tate Tyr 280 atg Met ttte The             | Leu y tct Ser 265 gct Ala y ttt Phe gca Ala tto                    | Leu 250 gtt Val c yat Arg Asr  | Gln  tca  Ser  ctt  Let  att  Ile  gaa  gaa  gaa  gaa  ata  cata  | Glu tgt Cys gct Ala Glu | Cys  gga gga gga yal 289 a tat Typ a tat e Typ g toa c ace         | Lys a ata y Ile 270 a gac l Asp c tto Phe c ct c Pro a gat c Asp              | Lys 255 a cct e Pro c tto p Phe c aga e Arg c Gly c Lys 335 g gaa 1 Gli         | Ile  gac  Asp  ccca  pro  aca  Glr  320  gaa  Glr  320  gaa  Glr  aca  cca  cca  cca  cca  cca  cca  c                         | ttc Phe a gat Asp a SAsp a Gat ttc Phe a gat Gly  | 920<br>968<br>1016<br>1064         |
| 98 100 100 100 100 100 111 111 111 112 122 12                           | O gtt<br>1 Val<br>2 agg<br>5 Arc<br>6 Ctt<br>9 Let<br>0 290<br>2 cca<br>3 Pro<br>4 caç<br>7 Glr<br>3 aaa<br>1 Lys                   | Ile  t cta  Let  g tca  g Ser  27!  t cca  i Pro  a aga  o Arg   | Glu a act 260 a agg r Arg a gat D Asp a cca g Pro a tct a ctt 1 Let 340               | Asp 245 245 2 gga 3 gat 3 cct 4 ttc 5 Pro 6 ttc 6 Leu 6 325 6 ccc 6 Arg   | Ala get Ala ggt Gly caa Gln tto Phe Cys caac                     | Val<br>999<br>Gly<br>att<br>Ile<br>909<br>Ala<br>295<br>aag<br>Lys<br>Cac<br>His | Lys  gtg Val  tat Tyr 280 Att Att Phe Lys Acc Thr     | Leu y tct 265 gct Ala y ttt Phe cag Glr Glr 345                    | Leu 250 250 251 251 252 253 253 254 255 255 255 255 255 255 255 255 255  | Gln  tca  Ser  ctt  Lev  att  Ile  315  GRA  116  | Glu tgt Cys gct Ala Glu 300 A ata Ile C tto                 | Cys  gga gga gga yal 289 a tat Tyr h a tat e Tyr g toa c acc p Thr | Lys a ata y Ile 270 a gac l Asp c ttc r Phe c ct r Pro a gat r Asp c Lei 350  | Lys 255 a cct e Pro c tto p Phe c aga e Arg c Gly c Lys 335 g gaa 1 Glu         | Ile  gac  Asp  cca  pro  aaaa  Lys  a caa  gaa  gaa  Glr  320  gaa  a cag  gaa | Ile  ttc  Phe  a gat  Asp  305  ttc  Phe  a gga  ttc  Phe  yga  gga  gga  Gly  gtt  Val | 920<br>968<br>1016<br>1064         |
| 98 100 100 100 100 100 111 111 111 112 112                              | 0 gtt<br>1 Val<br>2 agg<br>5 Arc<br>6 Ctt<br>9 Leu<br>0 290<br>2 cca<br>3 Pro<br>4 caç<br>7 Glr<br>3 aaa<br>1 Lys                   | Ile  t cta  t ca  g tca  g tca  g tca  g tca  g tca  g tca  g ca  a aga  a Arg  c ca  a pro  a cta  s Lei  g gga | Glu a act 260 a agg r Arg a gat D Asp a cca g Pro a tct 1 Let 340 a ato               | Asp 245 E gga C Gly G gat G Asp C Cto Pro A tto Phe C Cto A tto A | Ala get Ala ggt Gly caa Gln tto Ala Cys Asn                      | Val<br>ggg<br>att<br>Ile<br>gcg<br>Ala<br>295<br>aag<br>Lys<br>cac<br>His        | Lys  gtg Val  tat Tyr 280 atg Met Ttt Phe aaa Lys Thr | Leu y tct 265 gct Ala y ttt Phe cag Glr 345 cag                    | Leu 250 250 251 251 252 253 253 254 255 255 255 255 255 255 255 255 255  | Gln  tca  Ser  ctt  Lev  att  Jean  gaa  gaa  gaa  att  Jean  gaa  gaa  att  lev  att  cat  cat  cat  cat  cat  cat  ca | Glu  tgt cys            | Cys  Gys  Gys  Gys  Gys  Gys  Gys  Gys                             | Lys a ata y Ile 270 a gac l Asp c ttc r Phe c pro a gat r Asp c Lei 350 c ttt | Lys 255 a cct e Pro c tto p Phe c aga e Arg c Gly c Lys g gaa g Gaa i Gli c gca | Ile  gac  Asp  c cca  gac  c cca  gac  gac  gac  gac   | Ile  ttc  Phe  a gat  Asp  305  ttc  Phe  a ggat  Chelling  Gly  ggtt  Val              | 920<br>968<br>1016<br>1064<br>1112 |
| 98 100 100 100 100 100 111 111 111 112 112                              | 0 gtt<br>1 Val<br>2 agg<br>5 Arg<br>6 ctt<br>9 Let<br>0 290<br>2 cca<br>3 Pro<br>6 cag<br>7 Glr<br>3 aaa<br>1 Lys<br>2 gcg<br>5 Ala | Ile  t cta  t ca  g tca  g tca  g tca  g tca  g tca  g tca  g ca  a aga  a Arg  c ca  a pro  a cta  s Lei  g gga | Glu a act 1 Thi 260 a agg r Arg 5 a gat 0 Asp a cca g Pro a tct 1 Let 340 a ato y Ile | Asp 245 E gga C Gly G gat G Asp C Cto Pro A tto Phe C Cto A tto A | Ala get Ala ggt Gly caa Gln tto Ala Cys Asn                      | Val<br>ggg<br>att<br>Ile<br>gcg<br>Ala<br>295<br>aag<br>Lys<br>cac<br>His        | Lys  gtg Val  tat Tyr 280 atg Met Ttt Phe aaa Lys Thr | Leu y tot Ser 265 g tt Ala y ttt Phe Ala tto G Glr 345 c Cag e Glr | Leu 250 250 251 251 252 253 253 254 255 255 255 255 255 255 255 255 255  | Gln  tca  Ser  ctt  Lev  att  Jean  gaa  gaa  gaa  att  Jean  gaa  gaa  att  lev  att  cat  cat  cat  cat  cat  cat  ca | Glu  tgt cys            | Cys  Gys  Gys  Gys  Gys  Gys  Gys  Gys                             | Lys a ata y Ile 270 a gac l Asp c tto r Pho a gat c Asp c Lei 350 c ttt r Phe | Lys 255 a cct e Pro c tto p Phe c aga e Arg c Gly c Lys g gaa g Gaa i Gli c gca | Ile  gac  Asp  c cca  gac  c cca  gac  gac  gac  gac   | Ile  ttc  Phe  a gat  Asp  305  ttc  Phe  a gga  ttc  Phe  yga  gga  gga  Gly  gtt  Val | 920<br>968<br>1016<br>1064<br>1112 |

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|     |     |      |     |      |     | aaa  |     |      |     |     |         |     |            |     |     |      | 1208 |
|-----|-----|------|-----|------|-----|------|-----|------|-----|-----|---------|-----|------------|-----|-----|------|------|
| 129 | Ser | Cys  | Leu | Ile  | Cys | Lys  | Tyr | Lys  | Val | Asp | Cys     | Glu | Ala        | Val | Arg | Gly  |      |
| 130 | 370 |      |     |      |     | 375  |     |      |     |     | 380     |     |            |     |     | 385  |      |
| 132 | gat | att  | ttt | aat  | cag | gta  | gtt | cct  | cga | tgt | cct     | agg | tgc        | cca | gct | gat  | 1256 |
| 133 | Asp | Ile  | Phe | Asn  | Gln | Val  | Val | Pro  | Arg | Cys | Pro     | Arq | Cys        | Pro | Āla | Asp  |      |
| 134 | -   |      |     |      | 390 |      |     |      |     | 395 |         | _   | -          |     | 400 | -    |      |
|     | gaa | cca  | ctt | act  |     | atg  | aaa | cca  | gag | att | ata     | +++ | +++        | aat |     | aat  | 1304 |
|     |     |      |     |      |     | Met  |     |      |     |     |         |     |            |     | -   |      |      |
| 138 | OI. | 110  | шец | 405  | 110 | 1100 | Lyb | 110  | 410 | 110 | VUI     | rne | 1116       | 415 | GIU | ADII |      |
|     | ++- |      | ~   |      |     |      |     | ~~~  |     |     | +-+     |     |            |     |     |      | 1252 |
|     |     |      |     |      |     | cat  |     |      |     |     |         |     |            |     |     |      | 1352 |
|     | ьeu | PIO  |     | GIII | Рпе | His  | Arg |      | Met | ьуѕ | Tyr     | Asp | _          | Asp | GIU | vai  |      |
| 142 |     |      | 420 |      |     |      |     | 425  |     |     |         |     | 430        |     |     |      |      |
|     | _   |      |     |      |     | att  |     |      |     |     |         | _   | _          |     | _   | _    | 1400 |
| 145 | Asp | Leu  | Leu | Ile  | Val | Ile  | Gly | Ser  | Ser | Leu | Lys     | Val | Arg        | Pro | Val | Ala  |      |
| 146 |     | 435  |     |      |     |      | 440 |      |     |     |         | 445 |            |     |     |      |      |
| 148 | cta | att  | cca | agt  | tcc | ata  | CCC | cat  | gaa | gtg | cct     | cag | ata        | tta | att | aat  | 1448 |
| 149 | Leu | Ile  | Pro | Ser  | Ser | Ile  | Pro | His  | Glu | Val | Pro     | Gln | Ile        | Leu | Ile | Asn  |      |
|     | 450 |      |     |      |     | 455  |     |      |     |     | 460     |     |            |     | •   | 465  |      |
| 152 | aga | gaa  | cct | tta  | cct | cat  | cta | cat  | ttt | gat | qta     | σaσ | ctt        | ctt | aga | gac  | 1496 |
|     |     |      |     |      |     | His  |     |      |     |     |         |     |            |     |     |      |      |
| 154 |     |      |     |      | 470 |      | 200 | 1110 |     | 475 | • • • • | 0   | <b></b> ca | 200 | 480 | p    |      |
|     | tat | cat  | ata | ata  |     | aat  | ~== | tta  | tat |     | 200     | ++= | aat        | aat |     | tat  | 1544 |
|     |     |      |     |      |     |      |     |      |     |     |         |     |            |     |     |      | 1344 |
|     | Cys | Asp  | vai |      | TTE | Asn  | Gru | ьeu  | _   | nis | Arg     | ьеи | GIY        | _   | Gru | ıyı  |      |
| 158 |     |      |     | 485  |     |      |     |      | 490 |     |         |     |            | 495 |     |      |      |
|     |     |      |     |      |     | aac  |     |      | _   |     |         |     |            |     |     |      | 1592 |
|     | Ala | ьуs  |     | Cys  | Cys | Asn  | Pro |      | Lys | Leu | Ser     | GIu |            | Thr | GIu | Lys  |      |
| 162 |     |      | 500 |      |     |      |     | 505  |     |     |         |     | 510        |     |     |      |      |
| 164 | cct | cca  | cga | aca  | caa | aaa  | gaa | ttg  | gct | tat | ttg     | tca | gag        | ttg | cca | CCC  | 1640 |
| 165 | Pro | Pro  | Arg | Thr  | Gln | Lys  | Glu | Leu  | Ala | Tyr | Leu     | Ser | Glu        | Leu | Pro | Pro  |      |
| 166 |     | 515  |     |      |     |      | 520 |      |     |     |         | 525 |            |     |     | •    |      |
| 168 | aca | cct  | ctt | cat  | gtt | tca  | gaa | gac  | tca | agt | tca     | cca | gaa        | aga | act | tca  | 1688 |
| 169 | Thr | Pro  | Leu | His  | Val | Ser  | Glu | Asp  | Ser | Ser | Ser     | Pro | Glu        | Arg | Thr | Ser  |      |
|     | 530 |      |     |      |     | 535  |     | _    |     |     | 540     |     |            | _   |     | 545  |      |
| 172 | cca | cca  | gat | tct  | tca | gtg  | att | atc  | aca | ctt | tta     | gac | caa        | qca | act | aaq  | 1736 |
|     |     |      |     |      |     | Val  |     | _    |     |     |         | _   |            | -   | -   | -    |      |
| 174 |     |      |     |      | 550 |      |     |      |     | 555 |         | E   |            |     | 560 | -1-  |      |
|     | art | 22t  | ast | ast  |     | gat  | ata | tat  | ~>> |     | 222     | aat | tat        | ata |     | ~==  | 1784 |
|     | _   |      | _   | _    |     | _    |     |      | _   |     |         | ~~  | _          | _   | _   | -    | 1704 |
|     | ser | ASII | Asp |      | цец | Asp  | vai | ser  |     | ser | ьуѕ     | Сту | Cys        |     | GIU | GIU  |      |
| 178 |     |      |     | 565  |     |      |     |      | 570 |     |         |     |            | 575 |     |      | 1020 |
|     |     |      |     |      |     | caa  |     |      |     |     |         |     |            |     |     |      | 1832 |
|     | Lys | Pro  |     | GIu  | Val | Gln  | Thr |      | Arg | Asn | Val     | Glu |            | Ile | Ala | GIu  |      |
| 182 |     |      | 580 |      |     |      |     | 585  |     |     |         |     | 590        |     |     |      |      |
|     |     |      |     |      |     | gat  |     |      |     |     |         |     |            |     |     |      | 1880 |
| 185 | Gln | Met  | Glu | Asn  | Pro | Asp  | Leu | Lys  | Asn | Val | Gly     | Ser | Ser        | Thr | Gly | Glu  |      |
| 186 |     | 595  |     |      |     |      | 600 |      |     |     |         | 605 |            |     |     |      |      |
| 188 | aaa | aat  | gaa | aga  | act | tca  | gtg | gct  | gga | aca | gtg     | aga | aaa        | tgc | tgg | cct  | 1928 |
|     |     |      |     |      |     | Ser  |     |      |     |     |         |     |            |     |     |      |      |
|     | 610 |      |     | ر    |     | 615  |     |      | -1  |     | 620     | ر   | -          |     | L   | 625  |      |
|     |     | aga  | ata | gca  | aad | gag  | റമന | att  | act | add |         | ctt | gat        | aat | aat |      | 1976 |
|     |     | ~5~  | 2-3 | 504  | ~~5 | 2~3  | cag | ucc  | agu | ~33 | ~33     |     | 546        | שטי | ~~c | ~~3  | 20,0 |

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| 193<br>194                      | Asn                              | Arg                                     | Val                             | Ala                                       | Lys<br>630                                | Glu                                  | Gln                                  | Ile                                       | Ser                                     | Arg<br>635                           | Arg                                  | Leu                             | Asp                                  | Gly                             | Asn<br>640                           | Gln                                  |                      |
|---------------------------------|----------------------------------|---|---------------------------------|---|---|--------------------------------------|--------------------------------------|---|---|--------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|----------------------|
|                                 |                                  |   |                                 | ttg                                       |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      |                                      | 2024                 |
|                                 | Tyr                              | Leu                                     | Phe                             | Leu                                       | Pro                                       | Pro                                  | Asn                                  | Arg                                       |   | Ile                                  | Phe                                  | His                             | GIA                                  |                                 | GIu                                  | Val                                  |                      |
| 198                             | + - +                            | + ==                                    | ~~~                             | 645<br>tct                                | ~~~                                       | ant.                                 | ~~~                                  | ata                                       | 650                                     | tac                                  | tat                                  | aat                             | tot                                  | 655<br>tat                      | aac                                  | agt                                  | 2072                 |
|                                 |                                  |   |                                 | Ser                                       |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      |                                      | 2072                 |
| 202                             | +1-                              | 001                                     | 660                             | 001                                       | 010                                       |                                      | ·p                                   | 665                                       |   |                                      |                                      |                                 | 670                                  | - 2                             | - 4                                  |                                      |                      |
|                                 | aac                              | agt                                     | gat                             | agt                                       | ggg                                       | aca                                  | tgc                                  | cag                                       | agt                                     | cca                                  | agt                                  | tta                             | gaa                                  | gaa                             | ccc                                  | atg                                  | 2120                 |
|                                 |                                  |   |                                 | Ser                                       |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      |                                      |                      |
| 206                             |                                  | 675                                     |                                 |   |   |                                      | 680                                  |   |   |                                      |                                      | 685                             |                                      |                                 |                                      |                                      |                      |
|                                 |                                  |   |                                 | agt                                       |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      |                                      | 2168                 |
|                                 |                                  | Asp                                     | Glu                             | Ser                                       | Glu                                       |                                      | Glu                                  | Glu                                       | Phe                                     | Tyr                                  |                                      | GIY                             | Leu                                  | GIU                             | Asp                                  | 705                                  |                      |
|                                 | 690                              |   |                                 |   | ~~~                                       | 695                                  | aat                                  | ~~~                                       | ~~~                                     | aat                                  | 700                                  | +++                             | ~~~                                  | act                             | ast                                  |                                      | 2216                 |
|                                 |                                  |   |                                 | cca<br>Pro                                |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      |                                      | 2210                 |
| 214                             | PIO                              | Asp                                     | vai                             | FIO                                       | 710                                       | A. G                                 | AIG                                  | Gry                                       | Gry                                     | 715                                  | O <sub>1</sub>                       | 1110                            |                                      | ****                            | 720                                  | 017                                  |                      |
|                                 | gat                              | gat.                                    | caa                             | gag                                       |   | att                                  | aat                                  | gaa                                       | act                                     |                                      | tct                                  | ata                             | aaa                                  | caq                             |                                      | qta                                  | 2264                 |
| 217                             | Asp                              | Asp                                     | Gln                             | Glu                                       | Ala                                       | Ile                                  | Asn                                  | Glu                                       | Ala                                     | Ile                                  | Ser                                  | Val                             | Lys                                  | Gln                             | Glu                                  | Val                                  |                      |
| 218                             | -                                | -                                       |                                 | 725                                       |   |                                      |                                      |   | 730                                     |                                      |                                      |                                 | _                                    | 735                             |                                      |                                      |                      |
| 220                             | aca                              | gac                                     | atg                             | aac                                       | tat                                       | cca                                  | tca                                  | aac                                       | aaa                                     | tca                                  | tag                                  | tgta                            | aata                                 | att                             | gtgc                                 | aggtac                               | 2317                 |
| 221                             | Thr                              | Asp                                     | Met                             | Asn                                       | Tyr                                       | Pro                                  | Ser                                  | Asn                                       | Lys                                     | Ser                                  | *                                    |                                 |                                      |                                 |                                      |                                      |                      |
| 222                             |                                  |   | 740                             |   |   |                                      |                                      | 745                                       |   |                                      |                                      |                                 |                                      |                                 |                                      |                                      |                      |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | tgtgaa                               | 2377                 |
| 225                             | ctc                              | gata                                    | gag                             | caag                                      | gaaad                                     | cc a                                 | gaaa                                 | ggtgi                                     | t aat                                   | tatti                                | tata                                 | ggt                             | tggt                                 | aaa                             | atag                                 | attgtt                               | 2437                 |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | aacttt                               | 2497<br>2557         |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | actaac                               | 2617                 |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | tttgtt                               | 2677                 |
| 229                             | ttg                              | cctag                                   | grg .                           | aguu                                      | LCda                                      | 3 <b>a</b> l                         | ~~~~                                 | aaay                                      | 1 LL                                    | rata                                 | aaay                                 | dad                             |                                      | aat '                           | tata:                                | aattaa<br>acattg                     | 2737                 |
| 230                             | ngt.                             | aaay                                    | yya '                           | cayci                                     | ctasi                                     | il a                                 | tata                                 | ttace                                     | a aty                                   | ggta                                 | ++++                                 | gati                            | tett                                 | taa                             | caca                                 | attatt                               | 2797                 |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | tgacat                               | 2857                 |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | tacttt                               | 2917                 |
| 234                             | taa                              | aagt                                    | aat.                            | actt                                      | aata                                      | et a                                 | agaai                                | tttca                                     | a aa                                    | atta                                 | ttat                                 | att                             | tacq                                 | ttc                             | aaat                                 | gaagat                               | 2977                 |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | aacctg                               | 3037                 |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | tgcctg                               | 3097                 |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | gtagag                               | 3157                 |
| 238                             | ctt                              | gcat                                    | tga                             | tctt                                      | ttcca                                     | ac a                                 | agta                                 | ttaaa                                     | a ct                                    | gcca                                 | aaat                                 | gtg                             | aata                                 | tgc                             | aaag                                 | cctttc                               | 3217                 |
|                                 |                                  |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | gttttc                               | 3277                 |
| 240                             | cat                              | taat                                    | gag                             | gaga                                      | gcaa                                      | ca g                                 | gccc                                 | ctgai                                     | t ta                                    | taca                                 | gttc                                 | caa                             | agta                                 | ata                             | agat                                 | gttaat                               | 3337                 |
| 241                             | tgt                              | aatt                                    | cag                             | ccaga                                     | aaagt                                     | ta c                                 | atgt                                 | ctcc                                      | c at                                    | tggg.                                | agga                                 | ttt                             | ggtg                                 | tta                             | aata                                 | ccaaac                               | 3397                 |
|                                 | tgc                              |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      | atagtt                               | 3457                 |
| 242                             | _                                |   |                                 |   |   |                                      | taati                                | ttate                                     | c tt                                    | tatt                                 | taaa                                 | agc                             | ttag                                 | cct                             | qcct                                 | taaaac                               | 3517                 |
|                                 | aat                              |   |                                 |   |   |                                      |                                      |   |   |                                      |                                      |                                 |                                      |                                 |                                      |                                      | 2555                 |
| 244                             | tag                              | agat                                    | caa                             | cttt                                      | ctca                                      | gc t                                 | gcaa                                 | aagci                                     | t tc                                    | tagt                                 | cttt                                 | caa                             | gaag                                 | ttc                             | atac                                 | tttatg                               | 3577                 |
| 244<br>245                      | tag<br>aaa                       | agat<br>ttgc                            | caa<br>aca                      | cttt<br>gtaa                              | ctca<br>gcat                              | gc t<br>tt a                         | gcaa<br>tttt                         | aagci<br>tcaga                            | t to<br>a co                            | tagt<br>attt                         | cttt<br>ttga                         | caa<br>aca                      | gaag<br>tcac                         | ttc<br>tcc                      | atac<br>taaa                         | tttatg<br>ttaata                     | 3637                 |
| 244<br>245<br>246               | tag<br>aaa<br>aag                | agat<br>ttgc<br>tatt                    | caa<br>aca<br>cct               | cttt<br>gtaag<br>ctgti                    | ctca<br>gcati<br>tgcti                    | gc t<br>tt a<br>tt a                 | gcaa<br>tttt<br>gtat                 | aagci<br>tcaga<br>ttati                   | t tc<br>a cc<br>t ac                    | tagt<br>attt<br>aata                 | cttt<br>ttga<br>aaaa                 | caa<br>aca<br>ggg               | gaag<br>tcac<br>tttg                 | ttc<br>tcc<br>aaa               | atac<br>taaa<br>tata                 | tttatg<br>ttaata<br>gctgtt           | 3637<br>3697         |
| 244<br>245<br>246<br>247        | tag<br>aaa<br>aag<br>ctt         | agat<br>ttgc<br>tatt<br>tatg            | caa<br>aca<br>cct<br>cat        | cttt<br>gtaag<br>ctgti<br>aaaa            | ctcag<br>gcati<br>tgcti<br>cacc           | gc t<br>tt a<br>tt a<br>ca g         | gcaa<br>tttt<br>gtat<br>ctag         | aagci<br>tcaga<br>ttati<br>gacca          | t tc<br>a cc<br>t ac<br>a tt            | tagt<br>attt<br>aata<br>actg         | cttt<br>ttga<br>aaaa<br>ccag         | caa<br>aca<br>ggg<br>aga        | gaag<br>tcac<br>tttg<br>aaaa         | ttc<br>tcc<br>aaa<br>aat        | atac<br>taaa<br>tata<br>cgta         | tttatg<br>ttaata<br>gctgtt<br>ttgaat | 3637<br>3697<br>3757 |
| 244<br>245<br>246<br>247<br>248 | taga<br>aaa<br>aag<br>ctt<br>ggc | agate<br>ttgc<br>tatte<br>tatge<br>catt | caa<br>aca<br>cct<br>cat<br>tcc | cttte<br>gtaag<br>ctgti<br>aaaae<br>ctaci | ctcag<br>gcati<br>tgcti<br>cacco<br>ttata | gc t<br>tt a<br>tt a<br>ca g<br>aa g | gcaa<br>tttt<br>gtat<br>ctag<br>atgt | aagci<br>tcaga<br>ttati<br>gacca<br>ctcaa | t to<br>a coa<br>t aca<br>a tta<br>a to | tagt<br>attt<br>aata<br>actg<br>tgaa | cttt<br>ttga<br>aaaa<br>ccag<br>ttta | caa<br>aca<br>ggg<br>aga<br>ttt | gaag<br>tcac<br>tttg<br>aaaa<br>ggct | ttc<br>tcc<br>aaa<br>aat<br>aca | atac<br>taaa<br>tata<br>cgta<br>ctaa | tttatg<br>ttaata<br>gctgtt           | 3637<br>3697         |

RAW SEQUENCE LISTING DATE: 01/11/2007
PATENT APPLICATION: US/10/562,389 TIME: 09:42:42

Input Set : A:\13407-039US1.txt

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| 251<br>252<br>253<br>255<br>256 | cata<br>ttcc<br>atta<br><210<br><211                | agtet<br>ettea<br>aaaat<br>)> SE<br>L> LE | tt tac to the text of the text | atgt<br>ttttg<br>catt<br>NO:<br>1: 74 | aattgaat<br>tgaaat<br>tgaa<br>: 2 | t ac | tggo<br>laaac | atat<br>cagt | gtt<br>gtt  | ttgt  | aga<br>act | ctgt<br>tgta | ttaa | itg a<br>gt t | ctgg | ittgta<br>gatatc<br>iagtct | 3937<br>3997<br>4057<br>4107 |
|---------------------------------|---|---|--|---------------------------------------|-----------------------------------|------|---------------|--------------|-------------|-------|------------|--------------|------|---------------|------|----------------------------|------------------------------|
|                                 | 7 <212> TYPE: PRT<br>8 <213> ORGANISM: Homo Sapiens |   |  |                                       |                                   |      |               |              |             |       |            |              |      |               |      |                            |                              |
|                                 | 0 <400> SEQUENCE: 2                                 |   |  |                                       |                                   |      |               |              |             |       |            |              |      |               |      |                            |                              |
|                                 | Met   |   |  |                                       |                                   | ח ה  | T 011         | λla          | Leu         | Gln   | Dro        | Glv          | Gl v | Ser           | Dro  | Ser                        |                              |
| 261                             | Met<br>1  | Ald                                       | Asp  | GIU                                   | 5 A1a                             | на   | пеп           | Ala          | пец         | 10    | FIO        | Gry          | Gry  | BCI           | 15   | DCL                        |                              |
|                                 | Ala   | Δla                                       | Glv  | Δla                                   |                                   | Δra  | Glu           | Δla          | Δla         |       | Ser        | Pro          | Ala  | Glv           |      | Pro                        |                              |
| 264                             | AIG   | AIG                                       | OLY  | 20                                    | пор                               | 9    | 014           |              | 25          | -     |            |              |      | 30            |      |                            |                              |
|                                 | Leu   | Ara                                       | Lvs  |                                       | Pro                               | Ara  | Ara           | Asp          |             | Pro   | Glv        | Leu          | Glu  |               | Ser  | Pro                        |                              |
| 266                             |   |   | 35   | 5                                     |                                   | 5    | 3             | 40           | 2           |       |            |              | 45   | ~             |      |                            |                              |
|                                 | Gly   | Glu                                       |  | Glv                                   | Gly                               | Ala  | Ala           | Pro          | Glu         | Arg   | Glu        | Val          | Pro  | Ala           | Ala  | Ala                        |                              |
| 268                             | 2   | 50  |  | -                                     | •                                 |      | 55            |              |             | _     |            | 60           |      |               |      |                            |                              |
| 269                             | Arg   | Gly                                       | Cys  | Pro                                   | Gly                               | Ala  | Ala           | Ala          | Ala         | Ala   | Leu        | Trp          | Arg  | Glu           | Ala  | Glu                        |                              |
| 270                             | _   | _   | -  |                                       | _                                 | 70   |               |              |             |       | 75         |              |      |               |      | 80                         |                              |
| 271                             | Ala   | Glu                                       | Ala  | Ala                                   | Ala                               | Ala  | Gly           | Gly          | Glu         | Gln   | Glu        | Ala          | Gln  | Ala           | Thr  | Ala                        |                              |
| 2 <b>7</b> 2                    |   |   |  |                                       | 85                                |      |               |              |             | 90    |            |              |      |               | 95   |                            |                              |
| 273                             | Ala   | Ala                                       | Gly  | Glu                                   | Gly                               | Asp  | Asn           | Gly          | ${\tt Pro}$ | Gly   | Leu        | Gln          | Gly  | Pro           | Ser  | Arg                        |                              |
| 274                             |   |   |  | 100                                   |                                   |      |               |              | 105         |       |            |              |      | 110           |      | _                          |                              |
| 275                             | Glu   | Pro                                       | Pro  | Leu                                   | Ala                               | Asp  | Asn           | Leu          | Tyr         | Asp   | Glu        | Asp          | Asp  | Asp           | Asp  | Glu                        |                              |
| 276                             |   |   | 115  |                                       |                                   |      |               | 120          |             |       | _          | _            | 125  |               | _    | _                          |                              |
| 277                             | Gly   |   | Glu  | Glu                                   | Glu                               | Glu  |               | Ala          | Ala         | Ala   | Ala        |              | Gly  | Tyr           | Arg  | Asp                        |                              |
| 278                             |   | 130                                       |  |                                       | _                                 |      | 135           | _            | _           |       | _          | 140          | _,   |               | _    | _                          |                              |
|                                 | Asn   | Leu                                       | Leu  | Phe                                   | Gly                               |      | Glu           | Ile          | Ile         | Thr   |            | Gly          | Phe  | His           | Ser  |                            |                              |
|                                 | 145   | _   | _  | ~-7                                   |                                   | 150  | _             |              | <b>a</b>    | ***   | 155        | <b>C</b>     | 0    | 0             | 7    | 160                        |                              |
|                                 | Glu   | Ser                                       | Asp  | GIu                                   |                                   | Asp  | Arg           | Ala          | ser         |       | Ala        | ser          | Ser  | ser           |      | пр                         |                              |
| 282                             | m1  | D   | 3  | D                                     | 165                               | т1.  | ~1            | Desc         | П           | 170   | Dho        | 177          | Cln  | Cln           | 175  | Len                        |                              |
|                                 | Thr   | Pro                                       | Arg  |                                       | Arg                               | тте  | GIY           | PIO          | 185         | TIIL  | Pne        | vaı          | GIII | 190           | птэ  | Lieu                       |                              |
| 284                             | Met   | т1.                                       | C111   | 180                                   | Λcn                               | Pro  | λνα           | Thr          |             | T.011 | Larg       | Acn          | Leu  |               | Pro  | Glu                        |                              |
| 286                             | Mec   | 116                                       | 195  | 1111                                  | Азр                               | FIO  | Arg           | 200          | 110         | пец   | шуз        | тор          | 205  | шеш           |      | 014                        |                              |
|                                 | Thr   | Tle                                       |  | Pro                                   | Pro                               | Glu  | T.e.ii        |              | Asn         | Met   | Thr        | Leu          |      | Gln           | Ile  | Val                        |                              |
| 288                             |   | 210                                       | 110  | 110                                   | 110                               | OLU  | 215           | шр           | 1101        |       |            | 220          | E    |               |      |                            |                              |
|                                 | Ile   |   | Tle  | Leu                                   | Ser                               | Glu  |               | Pro          | Lvs         | Ara   | Lvs        |              | Arq  | Lys           | Asp  | Ile                        | •                            |
|                                 | 225   | 11011                                     |  |                                       | -                                 | 230  |               |              | -,-         | 5     | 235        | -4-          | 5    | 4             | -    | 240                        |                              |
| 291                             | Asn   | Thr                                       | Ile  | Glu                                   | Asp                               |      | Val           | Lvs          | Leu         | Leu   |            | Glu          | Cys  | Lys           | Lys  | Ile                        |                              |
| 292                             |   |   |  |                                       | 245                               |      |               | -            |             | 250   |            |              | _    | _             | 255  |                            |                              |
|                                 | Ile   | Val                                       | Leu  | Thr                                   |                                   | Ala  | Gly           | Val          | Ser         | Val   | Ser        | Cys          | Gly  | Ile           | Pro  | Asp                        |                              |
| 294                             |   |   |  | 260                                   | -                                 |      | -             |              | 265         |       |            | -            |      | 270           |      |                            |                              |
| 295                             | Phe   | Arg                                       | Ser  | Arg                                   | Asp                               | Gly  | Ile           | Tyr          | Ala         | Arg   | Leu        | Ala          | Val  | Asp           | Phe  | Pro                        |                              |
| 296                             |   |   | 275  |                                       |                                   |      |               | 280          |             |       |            |              | 285  |               |      |                            |                              |
| 297                             | Asp   | Leu                                       | Pro  | Asp                                   | Pro                               | Gln  | Ala           | Met          | Phe         | Asp   | Ile        | Glu          | Tyr  | Phe           | Arg  | Lys                        |                              |
| 298                             |   | 290                                       |  |                                       |                                   |      | 295           |              |             |       |            | 300          |      |               |      |                            |                              |
|                                 | Asp   | Pro                                       | Arg  | Pro                                   | Phe                               |      | Lys           | Phe          | Ala         | Lys   |            | Ile          | Tyr  | Pro           | Gly  |                            |                              |
| 300                             | 305   |   |  |                                       |                                   | 310  |               |              |             |       | 315        |              |      |               |      | 320                        |                              |

VERIFICATION SUMMARY

DATE: 01/11/2007 TIME: 09:42:43

PATENT APPLICATION: US/10/562,389

Input Set : A:\13407-039US1.txt

Output Set: N:\CRF4\01112007\J562389.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date